Claims

1. A hybrid pesticidal protein toxin comprising a cytotoxic agent and a pest gut epithelial cell recognition portion of a protein said cytotoxic agent and said recognition portion not being naturally contiguous.

2. The toxin, according to claim 1, wherein said cytotoxic agent is an ADP-ribosylating enzyme.

3. The toxin, according to claim 2, wherein said ADP-ribosylating enzyme is diphtheria toxin.

4. The toxin, according to claim 1, wherein said cytotoxic agent is a ribosome inactivating enzyme selected from the group consisting of ricin, dianthin, saporin, gelonin, tritin, abrin, and modeccin.

5. The toxin, according to claim 1, wherein said cytotoxic agent is a ribosome inactivating enzyme obtainable from a seed selected from the group consisting of barley, rye, corn, and wild bean.

6. The toxin, according to claim 3, wherein the diphtheria toxin used is the A fragment of the diphtheria toxin, plus the B fragment of the diphtheria toxin which has been truncated at the carboxyl terminus to remove the eukaryotic recognition region.

7. The toxin, according to claim 1, wherein said pesticidal protein toxin is a *Bacillus thuringiensis* protein toxin.

8. The toxin, according to claim 7, wherein said *Bacillus thuringiensis* protein toxin

is expressed by the gene fragment from *Bacillus thuringiensis* Var. *kurstaki* H.D.-73.

9. The toxin, according to claim 1, wherein said cytotoxic agent and pest gut epithelial cell recognition portion of a protein are linked together by a peptide linker of suitable length and amino acid composition to minimize susceptibility to insect protease cleavage.

10. The toxin, according to claim 9, wherein said peptide linker consists of four or less amino acids.

11. The toxin, according to claim 9 wherein said peptide linker does not contain lysine residues.

12. A toxin, according to claim 1, wherein said pest gut epithelial cell recognition portion of a protein is a nuclear polyhedrosis virus recognition fusogen.

13. The toxin, according to claim 12, wherein said nuclear polyhedrosis virus recognition fusogen is linked to a cytotoxic agent by a peptide linker of suitable length and amino acid composition to minimize susceptibility to insect protease cleavage.

14. The toxin, according to claim 13, wherein said peptide linker consists of four or less amino acids

15. The toxin, according to claim 12, wherein said peptide linker does not contain lysine residues.